ASBESTOS ASSES

SURVEY

H-K Building #: 25 Froject Number: 0980193E Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ

Building Number: 25
Building Name: FERMENTATION
SEATTLE, WASHINGTON
Building Type: BEER FERM.
Year Constructed: 1958

				AREA AVERAGE % ASBESTO					S: 41% **********					
	SAMPLE		MATERIAL DESCRIPTION	0&H	UNITS OF	PIPE		REMOVAL	REPLACEMENT	TOTAL				
LOCATION OF THE MATERIAL	NUMBER	ASB	MATERIAL DESCRIPTION	CODE	QUANTITY MEASURE	10	POT PL	COSTS	COSTS	COSTS				
along north wall	00-356408		pipe covering	OMA	28 ft. 6 in. O.D.					\$59				
along south wall	00-356408		pipe covering	OMA	55 ft. 4 in. O.D.					\$79				
along south wall	00-356408		pipe covering	AMO	8 ft. 6 in. 0.D.			\$104		\$16				
along north wall	00-356408	60%		OMA	65 ft. 4 in. O.D.			\$580		\$94				
southwest area-above air handling unit	00-356408		pipe covering	AHO	25 ft. 4 in. O.D.					\$36				
along west wall	00-356408	60%	pipe covering	AMO	110 ft. 4 in. O.D.					\$1,59				
crawl space-in north wall-near ceiling	00-356408	60%	pipe covering	OMA	5 ft. 4 in. O.D.	HPS/R	28 111	\$45	\$28	\$7.				
south center area-by convertor	00-356408	60%	pipe covering	OMA	46 ft. 4 in. 0.D.	HPS/R	28 111	\$410	\$257	\$66				
WE center area-above yeast retainers	00-356408	60X	pipe covering	AMO	16 ft. 4 in. 0.D.	HPS/R	28 111	\$143	\$89	\$232				
northeast area-by chilled water tank	00-356408		pipe covering	AMO	10 ft. 6 in. O.D.			\$130	\$81	\$21				
by northeast concrete column	00-356408	60%	pipe covering	AMO	60 ft. 4 in. 0.D.	HPS/R	28 111	\$89	\$56	\$14				
northeast area-by chilled water tank	00-356408		pipe covering	OMA	12 ft. 4 (n. O.D.			\$107	\$67	\$17				
north wall-northeast area	00-356415		wrapped cardboard/paper pipe	OMA	32 ft. 4 in. O.D.		28 111	\$285		\$46				
north wall-northeast area	00-356415		wrapped cardboard/paper pipe	OMA	3 ft. 8 in. 0.D.		28 111	\$42		\$7				
center-running north & south-at ceiling	00-356415		wrapped cardboard/paper pipe	OMA	20 ft. 6 in. O.D.		28 111	\$260		\$42				
north wall-northeast area	00-356415		wrapped cardboard/paper pipe	OMA	6 ft. 6 in. 0.D.		28 111	\$78		\$12				
center-running north & south-at ceiling	00-356415		wrapped cardboard/paper pipe	OMA	95 ft. 4 in. O.D.		28 111	\$847		\$1,37				
WW center area-above yeast retainers	00-356415		wrapped cardboard/paper pipe	OMA	48 ft. 4 in. O.D.		28 111			\$69				
slong north & west walls	02-356404		mjp on non-suspect pipe cover	OMA	15 4 in. 0.D.	DW		1	7200	•				
tong north a west watts	02-356405	0%	Imp on tion suspect pipe sole.	••••		•								
	02-356406	0%						į						
along north wall	03-356409		mjp on pipe covering	OMA	13 6 in. 0.D.	HPS/R	28 111	\$503	\$295	\$79				
crawl space-in north wall-near ceiling	03-356409		mip on pipe covering	OHA	1 4 in. O.D.	HPS/R		\$28		\$44				
southwest area-above air handling unit	03-356409		imip on pipe covering	OMA	3 4 in. 0.D.		28 111	\$84		\$13				
along north wall	03-356409		mjp on pipe covering	OMA	16 4 in. O.D.		28 111	\$449		\$69				
along south wall	03-356409		mjp on pipe covering	OHA	4 6 in. 0.D.		28 111	\$155		\$24				
along south wall	03-356409		mip on pipe covering	AMO	20 4 in. 0.D.		28 111	\$562		\$87				
along west wall	03-356409		mip on pipe covering	OHA	6 4 in. 0.D.		28 111	\$169		\$26				
by northeast concrete column	03-356409		m)p on pipe covering	OMA	2 4 in. 0.D.		28 111	\$56		\$8				
RE center area-above yeast retainers	03-356409	60%	mjp on pipe covering	OMA	3 4 in. 0.D.		28 111	\$30 \$84		\$13				
	03-356409			OMA						\$13 \$12				
northeast area-by chilled water tank			mjp on pipe covering		2 6 in. O.D.	HPS/R		\$77						
northeast area-by chilled water tank	03-356409		mjp on pipe covering	AHO	3 4 in. O.D.		28 111	\$84		\$13				
south center area-by convertor	03-356409		mjp on pipe covering	AMO	14 4 in. O.D.	HPS/R		\$393	\$219	\$61				
,	03-356410	40%	ĺ	• •			28 111							
_	03-356411	50X	l				28 111							
south center area-convertor tank-by AHU	04-356412	50%	boiler/tank insulation	OMB	11 sq.ft.		28 111	\$311	\$249	\$56				
•	04-356413	50%	1				28 111] .						
	04-356414	50%	·				28 111							
north wall-northeast area	05-356416	40%	mjp on wrapped cardboard/paper	AHO	2 8 in. O.D.	D₩	28 111	\$96	\$57	\$15				
center-running north & south-at ceiling	05-356416		mip on wrapped cardboard/paper		10 6 in. O.D.	DW	28 111			\$614				
north wall-northeast area	05-356416		mip on wrapped cardboard/paper		12 4 In. O.D.	DW	28 111			\$52				

HALL-KIMBRELL ENVIRONMENTAL INC.

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H-K Building #: 25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

north wall-northeast area center-running north & south-at ceiling NW center area-above yeast retainers	05-356416 05-356416 05-356416 05-356417	40% 40% 50%	mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper wrapped cardboard/paper pipe		15 4	in.	0.D. 0.D. in. O.D.	DM DM	28 111 28 111 28 111 28 111	\$116 \$421 \$143	\$68 \$234 \$89	\$184 \$655 \$232
SE area-above refrigeration tanks	05-356418 06-356419 06-356420 06-356421	50% 20% 50% 50%	mjp on non-suspect pipe cover	OHA	6 4	łn.	0.0.	DR	28 111 28 111 28 111 28 111	\$169	\$94	\$263

AREA COMMENTS

AREA # 01 TOTAL \$10,230 \$6,210 \$16,440

The materials are in fair to good condition with minor contact and water damage. The materials are approximately 1' to 16' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, extensive gross removal procedures are recommended. This appears to be a high traffic area.

	******	AREA NUMBER: 02	AREA DESCRIPTION: Basement	AREA AVERAGE % ASBESTOS: 3%	****
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LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	QUANTITY	UNITS OF MEASURE	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
tank room-running N & S-at center of rm east of elevator tank room-SE area-above ammonia tanks	07-356422 07-356422 07-356422 07-356423 07-356424	2%	cork pipe covering cork pipe covering cork pipe covering	OMA OMA OMA	10 f	t. 8 in. 0. t. 12 in. 0 t. 8 in. 0.	D RS/R	12 12 12	I۷	\$354 \$220 \$424	\$253 \$169 \$303	\$607 \$389 \$727

AREA COMMENTS

AREA # 02 TOTAL \$998 \$725 \$1,723

The material is in good condition with minor contact and water damage. The material is approximately 10' from the floor. At a minimum, it is recommended that the material be repaired and monitored. If removal is planned, glove bag removal procedures are recommended. This appears to be a high traffic area.

*****	AREA NUMBER: 03	AREA DESCRIPTION: 1st Floor-Above Permanent Ceiling	AREA AVERAGE % ASBESTOS: 28%	***

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M COOE	UNITS OF QUANTITY MEASURE	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
restroom restroom restroom restroom restroom	00-356400 00-356400 00-356407 01-356401 01-356401	10% 50% 40%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper		7 ft. 4 in. 0.D. 7 ft. 8 in. 0.D. 7 ft. 6 in. 0.D. 1 4 in. 0.D. 2 8 in. 0.D.	DW	17 17 17 17 17	1V 1V 1V 1V	\$62 \$99 \$91 \$28 \$96	\$71 \$57 \$16	\$101 \$170 \$148 \$44 \$153

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ASBESTOS ASSES SURVEY

H-K Building #: 25

Project Number: 0980193E

Project: G. HEILEHAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE. WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

01-356403 40X 17 IV

AREA COMMENTS

AREA # 03 TOTAL \$376 \$240 \$616

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low

*******	AREA NUMBER: 04	AREA DESCRIPTION: 2nd Floor-Above Permanent Ceiling	AREA AVERAGE X ASBESTOS: 22X	******

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE 1D		PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
restroom restroom restroom restroom restroom	00-356425 00-356425 00-356429 08-356426 08-356426 08-356427 08-356428	10% 35% 35%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper		20 ft. 4 in. 0.0. 7 ft. 8 in. 0.D. 7 ft. 6 in. 0.D. 3 8 in. 0.D. 7 4 in. 0.D.	DW	17 17 17 17 17 17	IV IV IV IV	\$178 \$99 \$91 \$144 \$197	\$112 \$71 \$57 \$85 \$109	\$290 \$170 \$148 \$229 \$300

AREA COMMENTS

AREA # 04 TOTAL \$709 \$434 \$1,143

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

					
******	AREA NUMBER: 05	AREA DESCRIPTION: 3rd Floor-Above Permanen	t Ceiling	AREA AVERAGE % ASBESTOS: 22%	****

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE ID		PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
restroom restroom restroom restroom restroom	00-356430 00-356430 00-356434 09-356431 09-356431 09-356432	10% 35% 33%	wrapped cardboard/paper pipe wrapped cardboard/paper pipe pipe covering mjp on wrapped cardboard/paper mjp on wrapped cardboard/paper		20 ft. 4 in. 0.D. 7 ft. 8 in. 0.D. 7 ft. 6 in. 0.D. 7 4 in. 0.D. 3 8 in. 0.D.	DW	17 17 17 17 17 17	IV IV IV IV	\$178 \$99 \$91 \$197 \$144	\$112 \$71 \$57 \$109 \$85	\$290 \$170 \$148 \$306 \$229

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SURVEY

H-K Building #: 25

Projects Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON Building Type: BEER FERM.

Year Constructed: 1958

AREA COMMENTS

AREA # 05 TOTAL \$709 \$434 \$1,143

The materials are in good condition with minor contact and water damage. The materials are approximately 1' to 10' from the floor. At a minimum, it is recommended that the materials be maintained and monitored. If removal is planned, glove bag removal procedures are recommended. This appears to be a low traffic area.

******** AREA NUMBER: 06 AREA DESCRIPTION: 4th Floor-Above Permanent Ceiling AREA AVERAGE % ASBESTOS: 33% ************

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE		INITS OF (EASURE	1	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL
anitor's closet	00-356435	10%	wrapped cardboard/paper pipe	OMA	18 ft.	4 in.	0.D.	DW	18	IV	\$161	\$100	\$26
anitor's closet	00-356435	10%	wrapped cardboard/paper pipe	AMO	8 ft.	8 in.	0.D.	DW	18	IV	\$113	\$81	\$19
anitor's closet	00-356439	50%	pipe covering	OMA	10 ft.	4 in.	0.D.	HPS/R	18	14	\$89	\$56	\$14
anitor's closet	00-356439	50%	pipe covering	OMA	55 ft.	6 in.	O.D.	HPS/R	18	17	\$714	\$446	\$1,10
anitor's closet	10-356436	20%	mjp on wrapped cardboard/paper	OMA	6 4	n. O.D.		DW	18	IV	\$169	\$94	\$26
anitor's closet	10-356436	20%	mjp on wrapped cardboard/paper	OMA	38	n. 0.D.		DW	18	IV	\$144	\$85	\$27
	10-356437	30%	1						18	IV		•	
	10-356438	30%			-				18	IV			
ianitor's closet	11-356440	50%	mjp on pipe covering	OHA	5 4	n. O.D.		HPS/R	18	IV	\$140	\$78	\$2
anitor's closet	11-356440		mjp on pipe covering	AHO	21 6	n. O.D.		HPS/R	18	IV	\$812	\$477	\$1,2
	11-356441	50%	1						18	IV			•
	11-356442	50%	1						18	ıv l			

AREA COMMENTS

AREA # 06 YOTAL \$2,342 \$1,417 \$3,759

The materials are in fair condition with localized contact and water damage. The materials are approximately 1' to 7' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M COOE		UNITS OF MEASURE	PIPE ID	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
janitor's closet	12-356443 12-356444 12-356445	60% 70% 55%	debris	OMF	6 sq	ą.ft.		110 110 110	1	\$100	\$0	\$100

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ASBESTOS ASSE! SURVEY

H-K Building #: 25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

AREA COMMENTS

AREA # 07 TOTAL \$100 \$0 \$100

This debris is magnesia pipe covering found on the floor of this area. At a minimum, it is recommended that the debris be removed. If removal is planned, gross removal procedures are recommended. This appears to be a low traffic area.

ļ	*******	AREA NUMBER: 08	AREA DESCRIPTION: 5th Floor-Hot Wort Tank Room	AREA AVERAGE % ASBESTOS: 35%	******

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE ID		PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
north wall-near floor north wall-near floor north wall-near floor	00-356446 00-356447 13-356448 13-356449 13-356450	30%	pipe covering pipe covering mjp on pipe covering	OHA OHA OHA	4 ft. 4 in. 0.D. 4 ft. 4 in. 0.D. 2 4 in. 0.D.		24 24 24 24 24	111 111 111		\$22 \$22 \$31	\$58 \$58 \$87

AREA COMMENTS

AREA # 08 TOTAL \$128 \$75 \$203

The materials are in good condition with minor contact damage. The materials are up to 41 from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a low traffic area.

AREA NUMBER: 09	AREA DESCRIPTION: Basement	AREA AVERAGE X ASBESTOS: 30X	******

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE 1D	EXP POT		REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
area east of elevator	00-356408	60%	pipe covering	OHA	18 ft. 4 in. O.D.	HPS/R	25	111	\$161	\$100	\$2
area east of elevator	00-356415	10%	urapped cardboard/paper pipe	AMO	18 ft. 8 in. 0.D.	DW	25	111	\$255	\$182	\$4
rea east of elevator	00-356415	10%	wrapped cardboard/paper pipe	AHO	8 ft. 6 in. 0.D.	DW	25	111	\$104	\$65	\$1
rea east of elevator	00-356415	10%	wrapped cardboard/paper pipe	AMO	25 ft. 4 in. O.D.	DW	25	111	\$223	\$139	\$3
of elevator-SE corner-above HW heater	00-356737	50%	pipe covering	OMA	8 ft. 4 in. 0.D.	DW	25	111	\$71	\$45	\$1
rea east of elevator	02-356404 02-356405 02-356406	0% 0% 0%	mjp on non-suspect pipe cover	OMA 	4 4 in. 0.D.	DW					
rea east of elevator	03-356409 03-356410 03-356411	60% 40% 50%	mjp on pipe covering	OMA	8 4 in. 0.D.	HPS/R	25	111 111 111	\$225	\$125	\$
rea east of elevator	05-356416	40%	mjp on wrapped cardboard/paper	OMA	6 8 in. O.D.	DW	25	111	\$289	\$170	\$
rem east of elevator	05-356416	40%	mjp on wrapped cardboard/paper	OMA	8 4 in. O.D.	DW	25	111	\$225	\$125	\$
rea east of elevator	05-356416 05-356417		mjp on wrapped cardboard/paper		7 6 in. O.D.	DW	25	111	\$271	\$159	\$

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ASBESTOS ASSES:

SURVEY

H-K Building #: 25

Project Number: 0980193E

Project: G. HEILEMAN BREWERY "E"

Date Inspected: 03/27/89 Inspector: TIM SWARTZ Building Number: 25

Building Name: FERMENTATION

SEATTLE, WASHINGTON

Building Type: BEER FERM. Year Constructed: 1958

05-356418 50X · 25 111

AREA COMMENTS

AREA # 09 TOTAL \$1,824 \$1,110 \$2,934

The materials are in good condition with minor contact damage. The materials are approximately 5' to 12' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, gross removal procedures are recommended. This appears to be a high traffic area.

LOCATION OF THE MATERIAL	SAMPLE NUMBER	ASB	MATERIAL DESCRIPTION	O&M CODE	UNITS OF QUANTITY MEASURE	PIPE 10	EXP POT	PL	REMOVAL COSTS	REPLACEMENT COSTS	TOTAL COSTS
2nd floor	00-356425	10%	wrapped cardboard/paper pipe	OMA	12 ft. 4 in. O.D	. DW	25	111	\$107	\$67	\$17
3rd floor	00-356430	10%	wrapped cardboard/paper pipe	AMO	12 ft. 4 in. 0.D	. DW	25	111	\$107	\$67	\$17
4th floor	00-356435	10%	wrapped cardboard/paper pipe	OMA	12 ft. 4 in. O.D	. DW	25	111	\$107	\$67	\$17
2nd floor	08-356426		mjp on wrapped cardboard/paper	OHA	1 4 in. 0.D.	DW		Ш	\$28	\$16	\$4
	08-356427	32%						111			
	08-356428	30%						111			
3rd floor	09-356431		mjp on wrapped cardboard/paper	AMO	1 4 in. O.D.	DW		111	\$28	\$16	\$4
	09-356432	20%	· ·				25	111			
	09-356433	40%	1				25	111			
4th floor	10-356436	20X	mjp on wrapped cardboard/paper	OMA	1 4 in. O.D.	DW	25	111	\$28	\$16	\$4
	10-356437	30%					25	111			
	10-356438	30%					25	111			

AREA COMMENTS

AREA # 10 TOTAL \$405 \$249 \$654

The materials are in good condition with minor contact damage. The materials are approximately 6' to 16' from the floor. At a minimum, it is recommended that the materials be repaired and monitored. If removal is planned, localized glove bag removal procedures are recommended. This appears to be a high traffic area.

BUILDING # 25 TOTAL \$17,821 \$10,894 \$28,715

HALL-KIMBRELL ENVIRONMENTAL INC.

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